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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,991	05/01/2001	Hiroshi Shibata	2271/64858	3907

7590

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EXAMINER
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SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/846,991

Applicant(s)

SHIBATA, HIROSHI

Examiner

Kristie Shingles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 05/23/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

*Claims 1-46 are pending.*

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. JP 2000-133419 filed on 05/02/2000.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 05/23/01 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Office. An initialed and dated copy of Applicant's IDS form 1449, is attached to the instant Office action.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 29. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

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immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claims 17 and 25 are objected to because of the following informalities: use of "and" in series should be "or". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Sampath et al (USPN 6,665,425).

- a. Per claim 1, Sampath et al teach a communications terminal apparatus, comprising:

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- a communications system configured to perform electronic communications with a manager supervising said apparatus (Abstract and col.7 line 57-col.8 line 20; system is in communication with the customer or the service engineer via a user interface for notifying the user and requesting repair from the service engineer or parts supplier);
- a detector detecting a status of usage of a consumable product used in said apparatus and supplied by a service depot (col.4 lines 34-42; the image quality analysis module detects defects and the image quality parameters);
- a register registering electronic communications addresses of said manager and said service depot, identification of said apparatus, specification of said consumable product, and identification of said service depot (col.1 line 61-col.2 line 58, col.3 line 53-col.4 line 10, and col.7 line 50-col.8 line 51; diagnostic system is capable of notifying the customer/user/manager via e-mail, web page, pager, etc and also machine-specific information is kept obtainable in knowledge servers and forwarded to the diagnostic inference engine); and
- a controller configured to send a request for supplying said consumable product to said manager using said electronic communications address when said detector detects that said consumable product is nearly ended and a report for reporting a completion of supplying said consumable product on said apparatus when said detector detects that said consumable product is refilled, said request including said identification of said apparatus, said specification of said consumable product, and said identification of said service depot (Abstract, col.4 line 11-col.5 line 8, col.6 lines 15-50 and col.7 line 50-col.8 line 51; implementation of diagnostic controller and diagnostic inference engine used to contact customer/user/manager upon detection of failed components or image defects thereby producing a list or analysis of failures and repairs).

b. Claims 5, 9 and 12 contain limitations substantially equivalent to the limitations of Claim 1 and are therefore rejected under the same basis.

c. Per claim 39, Sampath et al teach a method of maintaining a system that comprises networked units that may require from time to time at least one of replenishing consumables and servicing of components, wherein said consumables or servicing are provided

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by at least one external facility and said system of networked units is supervised by a manager who need not be at the premises of said units, said method comprising:

- automatically detecting a first event indicative of a requirement for replenishing consumables or servicing components at any one of said networked units, and generating a first detection signal in response to a detection of a first event at the unit (col.4 lines 34-42; the image quality analysis module detects defects and the image quality parameters);
- responding to the generation of a first detection signal at the unit to automatically generate and electronically transmit a first notification to each of (a) the manager supervising the networked units, and (b) the at least one external facility (Abstract and col.7 line 57-col.8 line 20; system is in communication with the customer or the service engineer via a user interface for notifying the user and requesting repair from the service engineer or parts supplier);
- wherein said first notification identifies at least said unit and said event to thereby advise both the manager and the at least one facility (a) which of the networked units has a requirement and (b) what is the requirement (col.1 line 61-col.2 line 58, col.3 line 53-col.4 line 10, and col.7 line 50-col.8 line 51; diagnostic system is capable of notifying the customer/user/manager via email, web page, pager, etc and also machine-specific information is kept obtainable in knowledge servers and forwarded to the diagnostic inference engine);
- automatically detecting thereafter at said unit a second event indicating that the requirement has been satisfied, and generating a second detection signal in response to a detection of said second event (Abstract and col.5 lines 1-8; verification process takes place after repairs to ensure operability); and
- responding to the generation of said second detection signal to automatically generate and transmit a second notification to at least one of said manager and said at least one facility (Abstract, col.5 lines 1-8 and col.8 lines 1-45; customers/users/managers are contacted during the verification process to ensure repair operability);
- said second notification advising that the requirement has been met (Abstract, col.5 lines 1-8 and col.8 lines 36-45; verification process takes place after repairs to ensure operability).

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d. Claims 15, 20, 23, 28, 31 and 35 contain limitations substantially equivalent to the limitations of Claims 1 and 39 and are therefore rejected under the same basis.

e. Per claim 2, Sampath et al teach a communications terminal apparatus as defined in claim 1, wherein said communications system performs E-mail communications with said manager (col.1 lines 61-67 and col.7 line 57-col.8 line 20; performs e-mail notifications to customers and customer service engineers and parts supplier).

f. Claims 6, 10, 13, 18, 26, 32, 36 and 42 contain limitations substantially equivalent to the limitations of Claim 2 and are therefore rejected under the same basis.

g. Per claim 3, Sampath et al teach a communications terminal apparatus as defined in claim 1, wherein said consumable product includes toner (col.7 lines 3-23 and col.8 lines 1-51; toner is provided for via use of image quality defect recognition circuit that can detect defects in parameters that include tone-reproduction, color balance, color variation, etc. parameters which would be effected by toner defects or the replacement thereof).

h. Claims 11, 33 and 44 contain limitations substantially equivalent to the limitations of Claim 3 and are therefore rejected under the same basis.

i. Per claim 4, Sampath et al teach a communications terminal apparatus as defined in claim 1, wherein said communications system performs facsimile communications with said manager (col.1 lines 40-67 and col.5 lines 9-22 and col.8 lines 11-20; system provides for facsimile implementation and allows for variety of communication means including but not limited to via e-mail, pagers, cellular phones, web pages which would also implicitly include communicating via facsimiles).

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j. Claims 8, 19, 22, 27, 30, 34, 38 and 43 contain limitations substantially equivalent to the limitations of Claim 4 and are therefore rejected under the same basis.

k. Per claim 7, Sampath et al teach a communications terminal apparatus as defined in claim 5, wherein said maintenance component includes a photoconductor (col.5 lines 9-22; system provides for implementation and repair on various types of printers, scanners, and photocopiers that by virtue of design use photoconductors).

l. Claims 14, 37 and 46 contain limitations substantially equivalent to the limitations of Claim 7 and are therefore rejected under the same basis.

m. Per claim 16, Sampath et al teach a communications terminal apparatus as defined in claim 15, further comprising:

- an analyzer configured to analyze E-mail including request receipt acknowledgement information notified from either said manager or said service depot with respect to said first E-mail (col.7 lines 36-67; input may be obtained from the user/customer/manager and analyzed by the image quality defect recognition circuit or diagnostic inference engine);
- a display displaying said request receipt acknowledgement information (col.8 lines 1-20; display of results and notifications),
- wherein said mail controlling system controls said display to display said request receipt acknowledgement information analyzed by said analyzer, and controls said display to stop displaying when said consumable product is determined to be in said refilled status based on said detect information detected by said consumable product status detector (Abstract and col.8 lines 1-51, col.10 line 65-col.11 line 13; diagnostics routine ends upon determining and verifying satisfactory machine operation).

n. Claims 21, 24 and 29 contain limitations substantially equivalent to the limitations of Claim 16 and are therefore rejected under the same basis.



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o. Per claim 17, Sampath et al teach a communications terminal apparatus as defined in claim 15, wherein said terminal identification information includes at least one of an E-mail address, a serial number, facsimile TTI information, and a telephone number of said apparatus (col.1 line 61-col.2 line 58, col.3 line 53-col.4 line 10, and col.7 line 50-col.8 line 51; diagnostic system is capable of notifying the customer/user/manager via e-mail, web page, pager, cellular phone, etc and also machine-specific information is kept obtainable in knowledge servers and forwarded to the diagnostic inference engine).

p. Claim 25 contains limitations substantially equivalent to the limitations of Claim 17 and is therefore rejected under the same basis.

q. Per claim 40, Sampath et al teach a method as in claim 39 including receiving at the unit, in response to said transmitting of said first notification, a first communication from at least one of said manager and said at least one external facility and displaying a selected representation of said response at the unit (col.2 lines 54-58, col.7 lines 36-67 and col.8 lines 1-20; input may be obtained from the user/customer/manager and analyzed by the image quality defect recognition circuit or diagnostic inference engine with the display results and notifications).

r. Per claim 41, Sampath et al teach a method as in claim 40 in which said communication is from said at least one external facility and advise when the request is expected to be met (col.1 lines 52-67 and col.2 lines 54-67; communication with customer service engineers may involve scheduling of the repair service or remediation, which would include advising when the request is expected to be satisfied).

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s. Per claim 45, Sampath et al teach a method as in claim 39 in which said first event is indicative of a requirement to service a heater in said unit (col.3 line 53-col.4 line 26; data collected from the machine may include calibration, temperature, usage, configuration information, etc. which, if defected, may be due to a heater inside the machine thus requiring service according to the system's embodiments).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Dulberg et al (US 20030005107) disclose a support network.
- b. Richards et al (USPN 6,754,707) disclose a secure computer support system.
- c. Sampath et al (USPN 6,519,552) disclose systems and methods for a hybrid diagnostic approach of real time diagnosis of electronic systems.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 703-605-4244. The examiner can normally be reached on Monday-Friday 8:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles  
Examiner  
Art Unit 2141

kds

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER